


GRADE ACHIEVEMENT TEST  
SCIENCE

# Grade 6 Achievement Test Science

June 1994

 Students  
First!  
Student Evaluation

**Alberta**  
EDUCATION

LB  
3054  
C2  
D362  
1994  
CURRHIST



EX LIBRIS  
UNIVERSITATIS  
ALBERTÆNSIS

Copyright 1994, the Crown in Right of Alberta, as represented by the Minister of Education, Alberta Education, Student Evaluation Branch, 11160 Jasper Avenue, Edmonton, Alberta, T5K 0L2. All rights reserved. Additional copies may be purchased from the Learning Resources Distributing Centre.

**Special permission** is granted to **Alberta educators only** to reproduce, for educational purposes and on a non-profit basis, parts of this test that do **not** contain excerpted material **only after the administration of this test**.

Excerpted material in this test **shall not** be reproduced without the written permission of the original publisher (see credits page, where applicable).

UNIVERSITY LIBRARY  
UNIVERSITY OF ALBERTA

**GRADE 6 ACHIEVEMENT TEST**  
**SCIENCE**

**General Instructions**

- You have 1 hour and 30 minutes to complete this test.
- There are 60 multiple-choice questions on this test.
- Calculators may be used but are not necessary.
- On the answer sheet provided, use **only** an **HB** pencil.
- Choose the **correct** or **best** answer.
- If you change an answer, **erase** your first mark **completely**.
- Make sure that the number of the question on your answer sheet matches the number of the question you are answering.

**Example**

1. This test is for the subject area of
- A. Science
  - B. Mathematics
  - C. Language Arts
  - D. Social Studies

**Answer Sheet**

1    ●    (B)    (C)    (D)

**Do not turn this page until your teacher tells you to do so.**

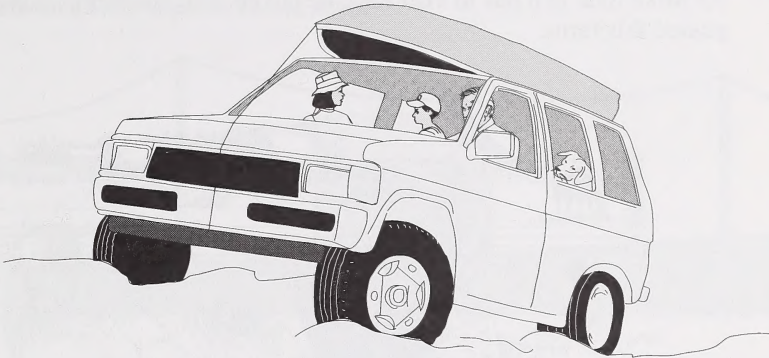


Digitized by the Internet Archive  
in 2015

<https://archive.org/details/grade6achievement00albe>



## CAMPING TRIP



Mike travelled to visit his cousin Rita on an Indian Reserve. They planned to go on a camping trip with Rita's grandfather. Rita was interested in stars and planets, so she wanted to take an astronomy book and Mike had books about plants and animals. The next ten questions are about Mike's trip and the camping trip.

*Use the following information to answer question 1.*

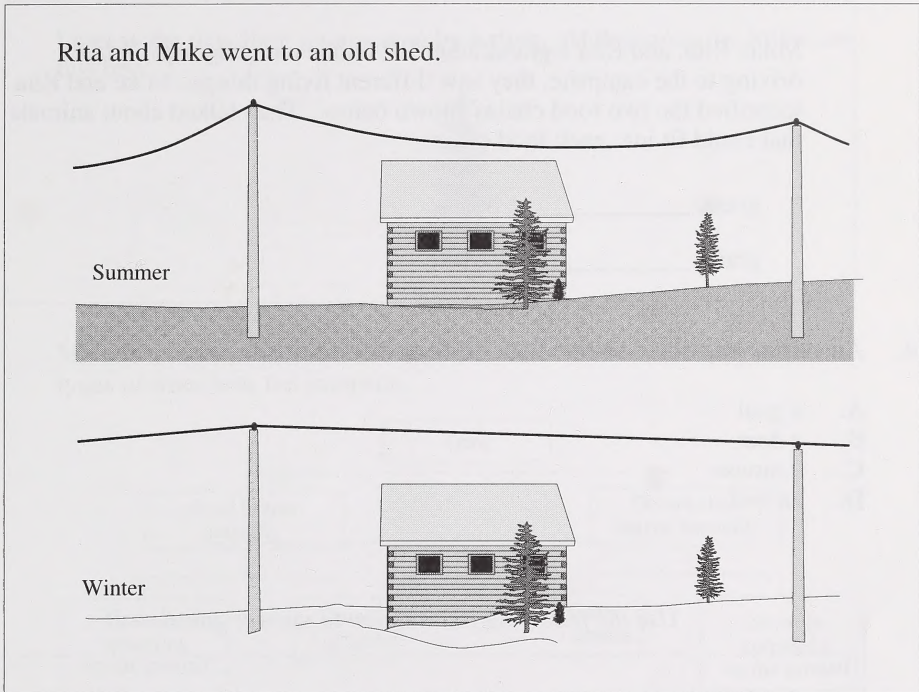
As Mike rode in a bus to visit Rita, he talked with another passenger. They passed this farm.



1. Mike pointed out that a living thing that can produce its own food is the
  - A. sheep
  - B. bird
  - C. horse
  - D. grass

Use the following information to answer questions 2 and 3.

Rita and Mike went to an old shed.



2. Rita told Mike that she had observed that the length of the power-line wire changed from summer to winter. Rita explained that this is **probably** because the
- A. power-line wire contracts in winter
  - B. power-line wire contracts in summer
  - C. power poles sink in the ground
  - D. power poles expand when dry
3. Rita dug for fishing worms under two piles of leaves. She noticed that most of the worms were close to the surface of the soil. She **correctly predicted** that when she dug under a nearby pile of leaves, she would find worms
- A. in the leaves
  - B. deep in the soil
  - C. on top of the pile
  - D. near the surface of the soil



*Use the following information to answer question 4.*

Mike, Rita, and Rita's grandfather left on the camping trip. While driving to the campsite, they saw different living things. Mike and Rita identified the two food chains shown below. They talked about animals that could fit into each food chain.

grass, \_\_\_\_\_, hawk

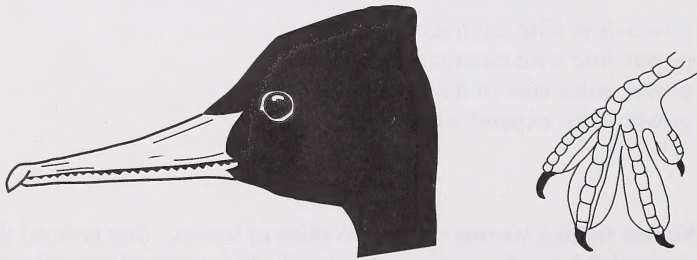
grain, \_\_\_\_\_, coyote

4. An animal that could fit into both of these food chains is

- A. a goat
- B. a deer
- C. a mouse
- D. an owl

*Use the following information to answer question 5.*

They stopped by a lake. Through his binoculars, Mike saw a merganser. He found pictures of it in his bird identification book. Rita asked Mike about the type of food that the merganser eats.



5. Mike said that based on these pictures, the merganser is **likely**

- A. a meat eater
- B. a plant eater
- C. an insect eater
- D. a grain eater



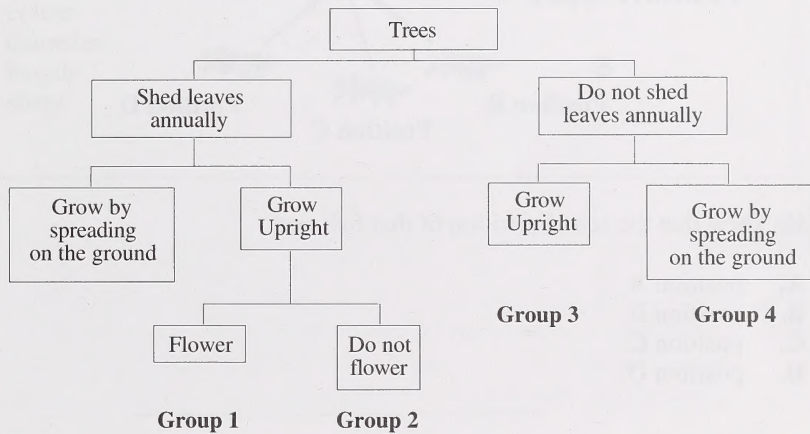
Use the following information to answer question 6.

Later in the day, they set up camp by a river. At the campsite, Mike saw this tree.



Spruce tree

Mike is interested in trees. He used the chart below to classify different types of trees near the campsite.

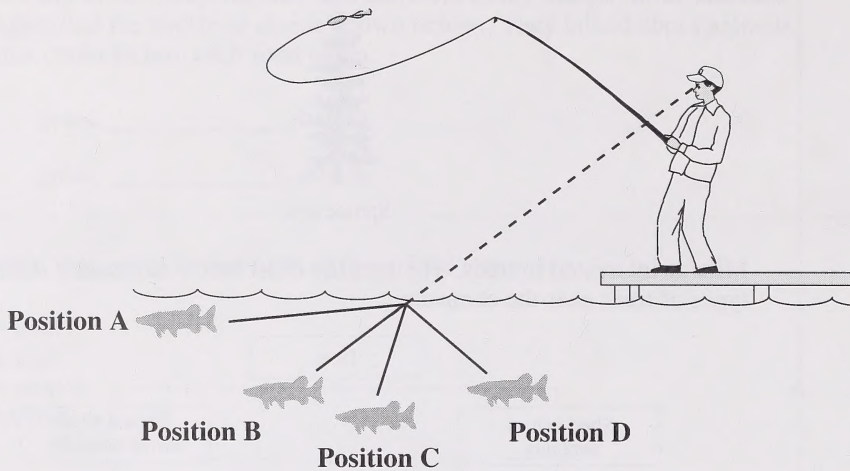


6. He classified the spruce tree as belonging to

- A. Group 1
- B. Group 2
- C. Group 3
- D. Group 4

Use the following information to answer question 7.

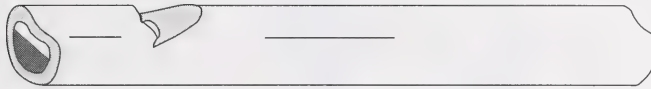
When Mike went fishing that afternoon, he saw a fish near the pier.



7. He knew that the actual position of that fish was
- A. position A
  - B. position B
  - C. position C
  - D. position D
- 
8. Rita observed an eagle soaring on air currents for a long period of time. She told Mike that the eagle's ability to soar is **best** suited for
- A. finding prey and keeping warm
  - B. conserving energy and finding prey
  - C. eating food and keeping warm
  - D. conserving energy and eating food

*Use the following information to answer question 9.*

Grandfather took his dog for a walk in a marshy area. He collected hollow reeds and later made whistles, like the one shown, for Rita and Mike.



9. Grandfather's whistles made different sounds. The variable that he changed that did **not** affect the sound was the
- A. colour
  - B. diameter
  - C. length
  - D. shape



Use the following information to answer question 10.

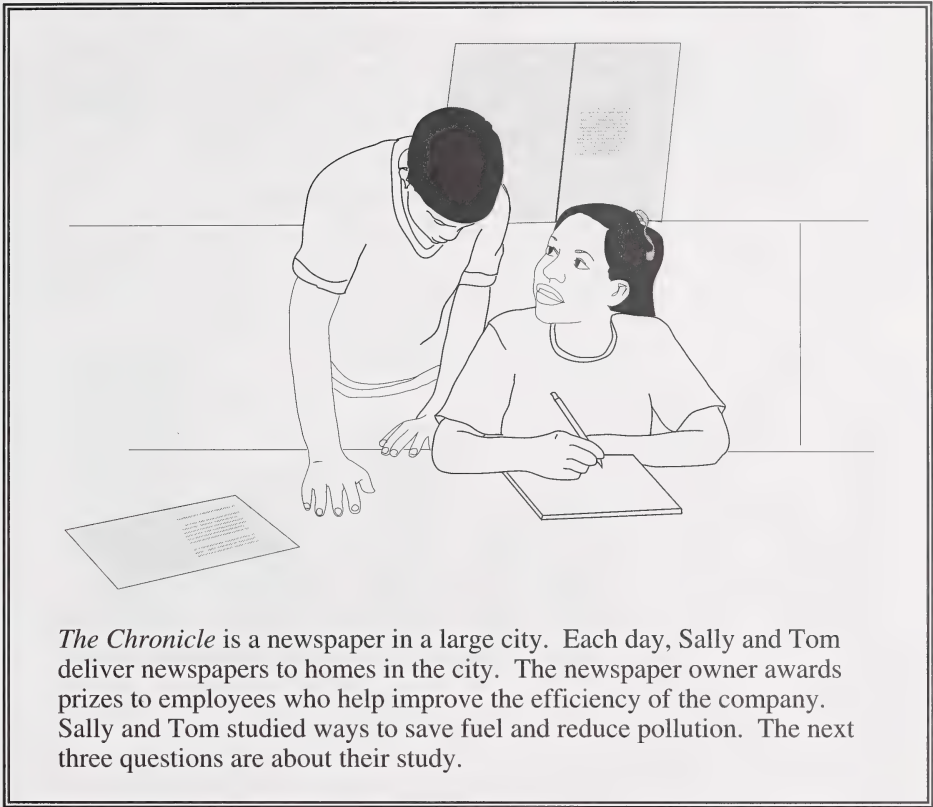
That night, everyone sat around the campfire. While Rita was looking through her binoculars, she noticed a particularly bright star. She looked in her astronomy book and found this chart.

Name of Star	Brightness	Distance from Earth (light years)
Beta Cassiopeiae	2	45
Delta Aquarii	3	84
Epsilon Andromedae	4	105
Fomalhaut	1	23

Brightness: 1 = very bright  
4 = very dull

10. From this chart, Rita interpreted correctly that brightness
- A. is not affected by distance
  - B. increases as distance increases
  - C. decreases as distance increases
  - D. remains the same as distance decreases

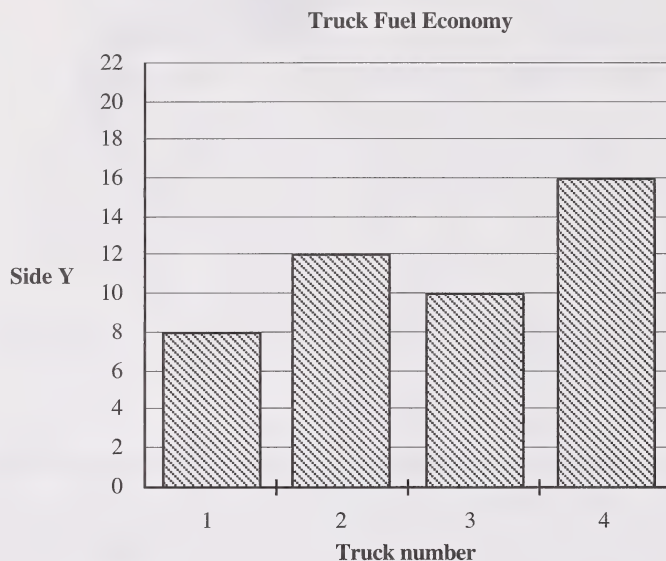
## NEWSPAPER



*The Chronicle* is a newspaper in a large city. Each day, Sally and Tom deliver newspapers to homes in the city. The newspaper owner awards prizes to employees who help improve the efficiency of the company. Sally and Tom studied ways to save fuel and reduce pollution. The next three questions are about their study.

Use the following information to answer questions 11 and 12.

To find a way to save money and fuel, Sally kept track of how far four different delivery trucks on the same route could travel on one litre of fuel. Truck 1 went 8 km, truck 2 went 12 km, truck 3 went 10 km, and truck 4 went 16 km. Sally made this graph to show her findings.



11. Sally couldn't decide which unit to use for **side Y**. Tom said that the correct unit is
- A. L/100 km
  - B. km/L
  - C. km/100 L
  - D. L/km
12. Sally looked at the graph and concluded that the newspaper would save the **most** fuel by using **only** trucks
- A. 1 and 3
  - B. 2 and 4
  - C. 3 and 2
  - D. 4 and 1



13. The energy source that the trucks could use in the future that would add the **least** to air pollution is
- A. electricity
  - B. propane
  - C. gasoline
  - D. diesel

## CITY



Omid and Anne live close to the centre of a large city in Alberta. They like to work and play at home, go on bike rides, and learn about wildlife. The next ten questions are about Omid's and Anne's experiences.

Use the following information to answer question 14.

Many times throughout the day, jets fly over Anne's house. She wants to know how noise levels affect hearing.

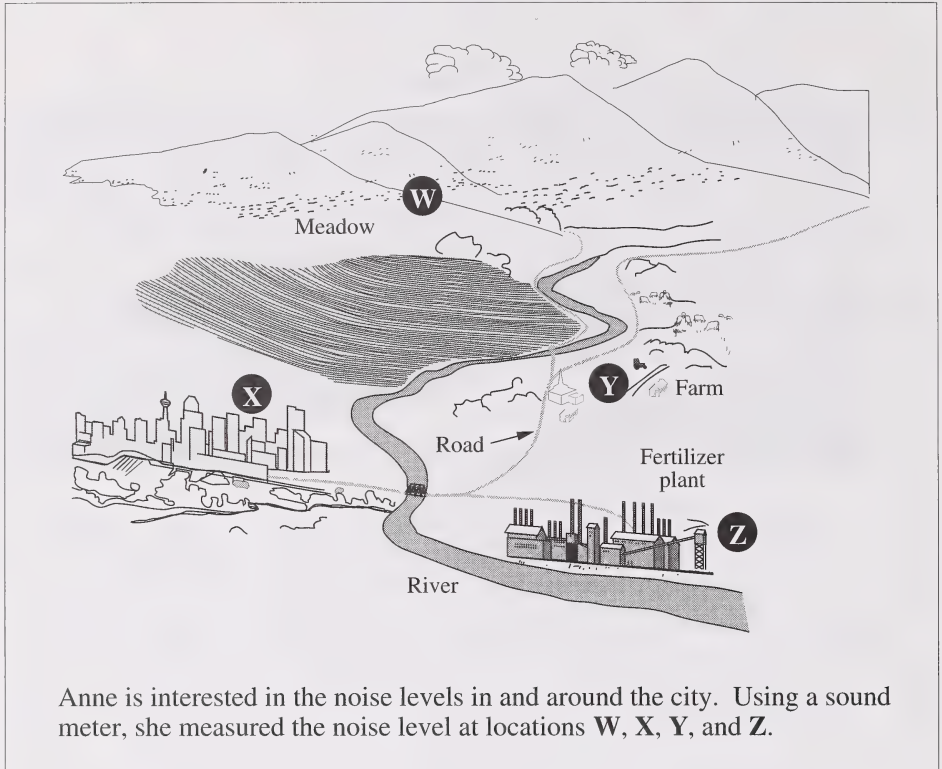
**Noise Level of Various Activities**

<b>Decibel Level and Noise Type</b>	<b>Distance from Noise (metres)</b>
0—no noise	
30—soft whisper	1.5
70—car passing at 100 km/hour, faucet with running water	8
80—electric mixer, shower, vacuum cleaner	1
90—motorcycle, electric blender	1
100—farm tractor	2
110—hard rock band	10
120—jet takeoff	60
130—emergency siren	5
140—race car near start line	10

14. According to the information in this chart, which of the following noise types, at the distance shown, would have the **least** effect on hearing?
- A. Farm tractor
  - B. Race car near start line
  - C. Hard rock band
  - D. Emergency siren



Use the following information to answer question 15.



15. The noise level would probably be the **lowest** at location

- A. W
- B. X
- C. Y
- D. Z

Use the following information to answer question 16.

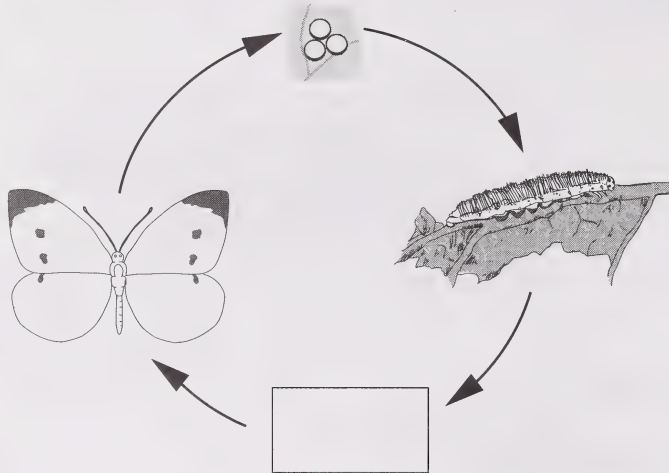
Omid helped to paint the fence at his home. Paint splashed on some leaves on a bush. Because he was concerned about the effect of paint on the leaves, Omid checked the bush after a few days. He recorded his observations on this chart.

Paint on Leaves	Condition of Leaves
Both sides covered Speckles on top only Top only covered Bottom only covered	Dead Alive Edges turned brown Dead

16. These leaves died when they were
- A. covered with paint on the top
  - B. covered with paint on the bottom
  - C. touched with paint on their edges
  - D. speckled with paint
- 
17. Anne designed a bird feeder to attract chickadees. To find out what kind of bird food chickadees prefer, which variable should Anne change?
- A. Type of wood that she uses to build the bird feeder
  - B. Time of day that she fills the bird feeder
  - C. Type of seeds that she puts in the bird feeder
  - D. Amount of seeds that she puts in the bird feeder

Use the following information to answer question 18.

Anne knows that butterflies have four stages in their growth. In her garden, she saw three of the stages of a cabbage butterfly and made this diagram.



18. To complete her diagram of the life cycle, Anne needs to draw a living thing that looks like

A.



B.



C.



D.





19. Omid and Anne take long bike rides. To make their bicycles safer to ride at night, they want to attach lights. Omid and Anne know they will need a closed circuit. Which diagram shows a closed circuit?

A.



B.




C.





D.





Legend

 Battery

 Headlight

 Taillight

 Wire

 Top view of bicycle

20. Omid is testing four circuits. If one bulb burns out, in which circuit will the remaining bulb stay on?

A.



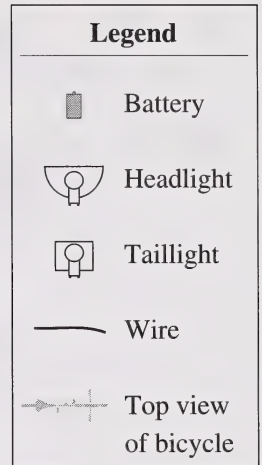
B.



C.



D.



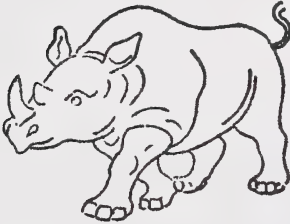
21. Omid and Anne rode their bikes to the zoo. Omid thought it would be fun to give a new name to one of the zoo animals. He used Latin and Greek words from this display.

### Latin and Greek Words

bi	— means two
cornus	— means horn
macro	— means big
micro	— means small
ped	— means foot
uni	— means one

Omid called the animal a **macrounicornus**. Which of the following animals did Omid **most likely** give this name to?

A.



B.



C.

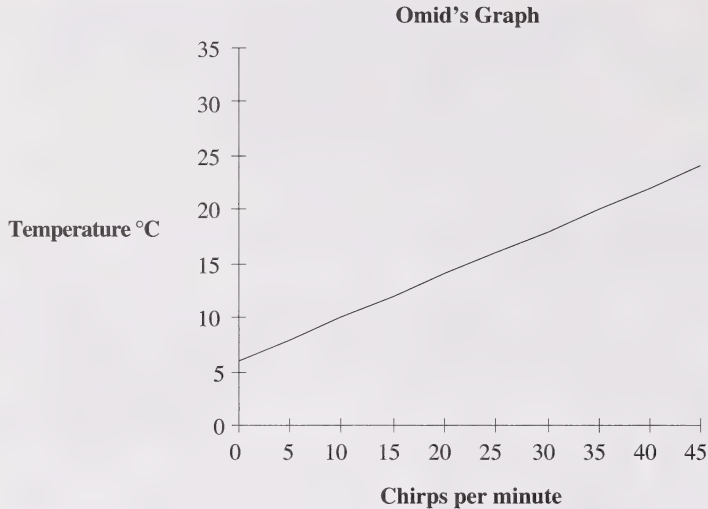


D.



Use the following information to answer question 22.

Omid read that air temperature can be estimated by counting the number of chirps that a cricket makes in one minute. He collected data and made this graph.



22. On a night when Omid hears no crickets chirping, the temperature is **likely**
- A. above 6°C
  - B. increasing from 10°C to 30°C
  - C. decreasing from 30°C to 6°C
  - D. below 6°C
- 
23. In the fall, Omid and Anne saw some Canada geese at a park. Which observation is of an adapted behaviour?
- A. Geese have waterproof feathers.
  - B. Geese have webbed feet.
  - C. Geese eat grass.
  - D. Geese migrate south.



## WOLVERINE SKI HILL



Sam and Jennifer are members of the Wolverine Ski Club. At the club's next meeting, they will be reporting on ways that the club could save energy, and they will be giving information about the use of the club's hill. Also, they are interested in ski maintenance. The next six questions are about their experiences and the ski hill.

*Use the following information to answer question 24.*

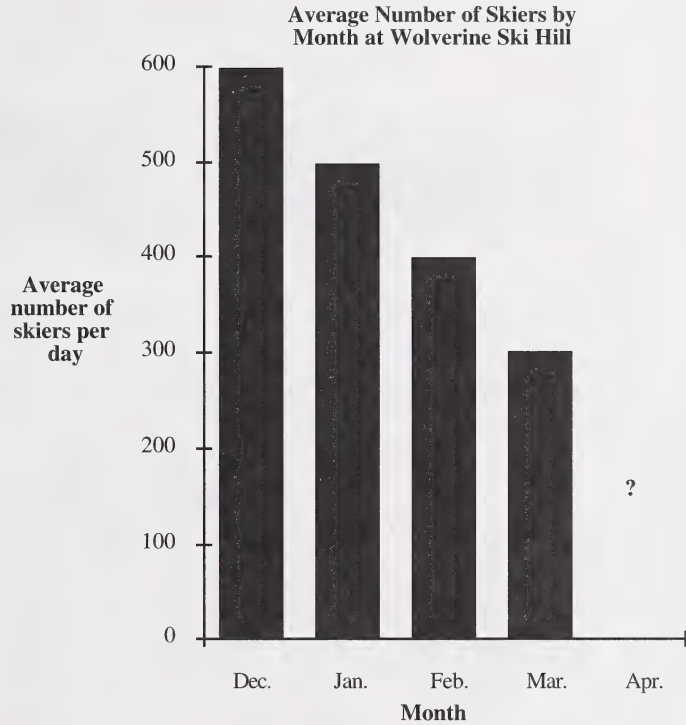
Sam and Jennifer suggested the following ways of conserving energy during the winter:

- install extra insulation in the attic of the ski lodge
- use the blackboard more instead of the copying machine
- turn off the lights and keep the blinds open to let in natural light

24. Club members suggested other methods of conserving energy. The **best** suggestion that a club member made was to
- A. turn the lights off every night
  - B. leave the lights on to heat the building
  - C. open the window curtains every night
  - D. always leave the thermostat at 24°C

Use the following information to answer question 25.

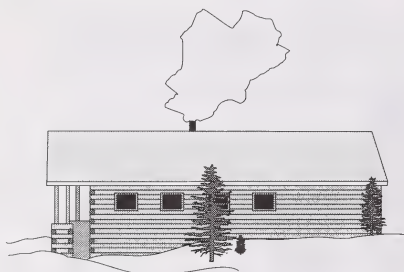
Sam provided this graph showing the average number of skiers at the hill per day for each month from December to March.



25. The club members wanted to predict the average number of skiers per day for April. Using the graph, the **best** prediction Sam could make would be
- A. 100 skiers
  - B. 120 skiers
  - C. 200 skiers
  - D. 300 skiers

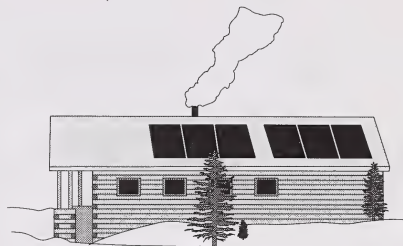
Use the following information to answer questions 26 and 27.

At the meeting, Jennifer reported that solar panels used to collect energy from the sun were installed on the ski lodge roof in June of 1993.



1992

Lodge before solar panels



1993

Lodge after solar panels

She presented the club members with this comparison of the lodge's heating bills.

Month	Heating Bill in 1992	Heating Bill in 1993
September	\$100.00	\$80.00
October	\$120.00	\$90.00
November	\$200.00	\$80.00
December	\$300.00	\$100.00

26. Using this information, Jennifer correctly inferred that heating costs

- A. decrease when heat is produced by solar energy
- B. decrease when there is greater cloud cover
- C. increase when there are more solar panels
- D. increase during warmer winters

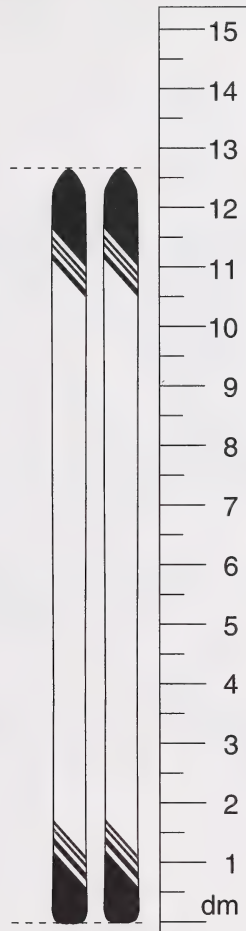
27. Solar panels use

- A. renewable energy
- B. nuclear energy
- C. simple electric circuits
- D. non-renewable energy



Use the following information to answer question 28.

Sam was thinking of buying a bag for his skis, so he measured them.

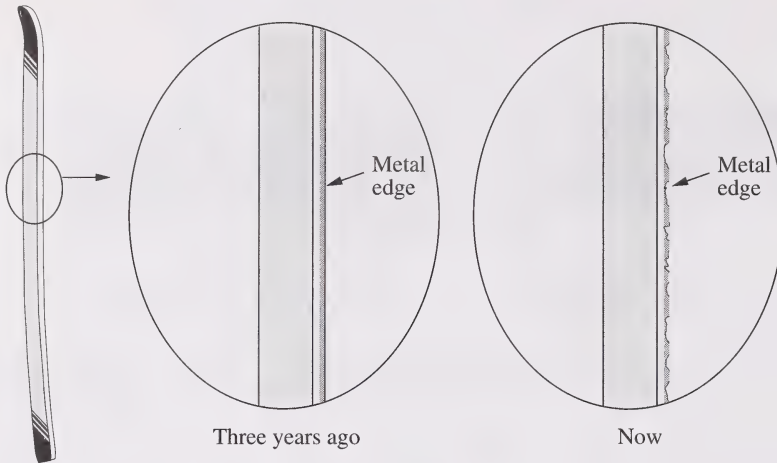


28. How long are Sam's skis?

- A. 123 cm
- B. 127 cm
- C. 132 cm
- D. 129 cm

Use the following information to answer question 29.

Sam saw rust on the metal edges of his skis. The rust had not been there when he bought them three years ago. Sam knew that some changes to metals can be reversed and that others cannot.



29. Which row on the chart shows the **best** inference and prediction for Sam's observation?

Row	Inference	Prediction
	Metal Composition Changed?	Change Can Be Reversed?
A	yes	yes
B	yes	no
C	no	yes
D	no	no

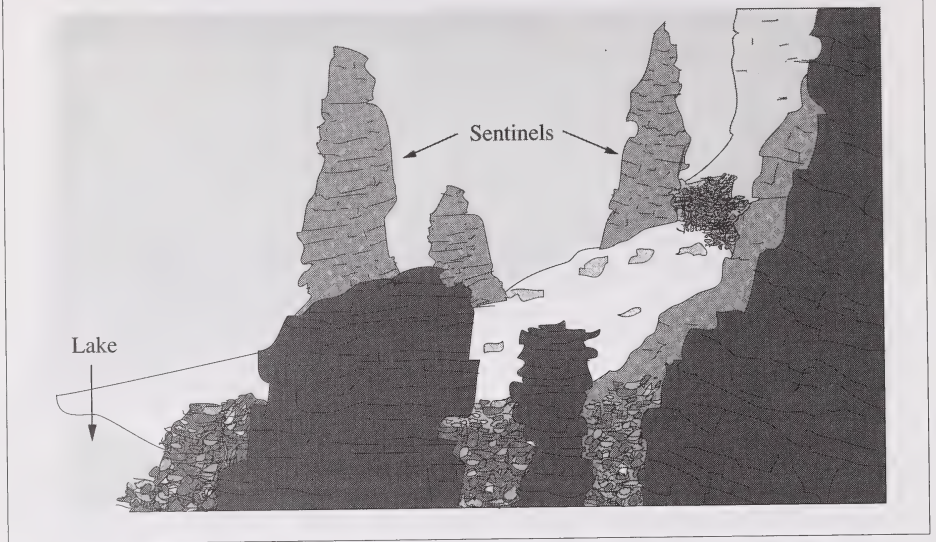
## A MOUNTAIN VACATION



One year, Tom and Joyce went camping with their parents in the mountains. While at the campground, they explored the area, visited a nature centre, and listened to a park naturalist. The following seven questions are about their experiences.

Use the following information to answer question 30.

While exploring near the campground, Tom saw sentinel peaks by a lake.



30. Tom thought about changes that will occur in this environment in the next hundred years. From what can be observed in the above picture, the **best** prediction he could make is that the
- A. water level in the lake will rise
  - B. water level in the lake will drop
  - C. sentinel peaks will become higher
  - D. sentinel peaks will become lower



Use the following information to answer question 31.

Tom examined four stones he had picked up at the lake. He tested the hardness of each stone in turn by scratching each of the other stones with it. He recorded his observations.

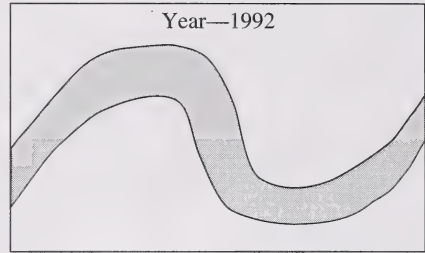
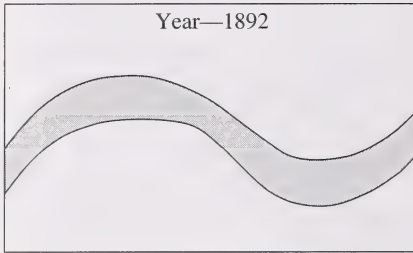
Stone	Stones it scratched	Stones it did not scratch
1	2 and 3	4
2	3	1 and 4
3	none	1, 2, and 4
4	1, 2, and 3	none

31. The stones he found, listed in order from **softest** to **hardest**, are

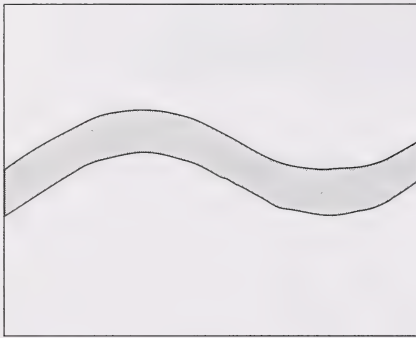
- A. 1, 2, 3, 4
- B. 3, 2, 4, 1
- C. 1, 4, 2, 3
- D. 3, 2, 1, 4

Use the following information to answer question 32.

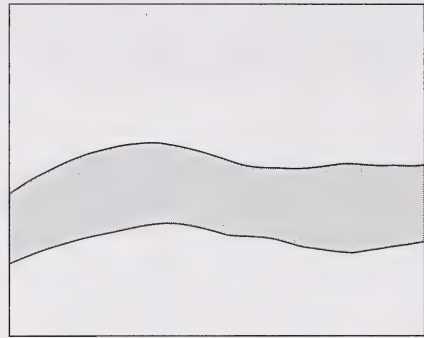
Joyce liked the river near their campsite. The nature centre had two maps showing the same section of the river in different years.



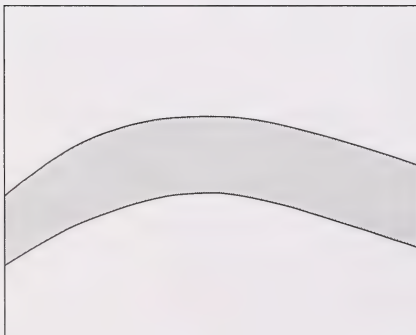
32. In another one hundred years, this section of the river will probably be mapped as



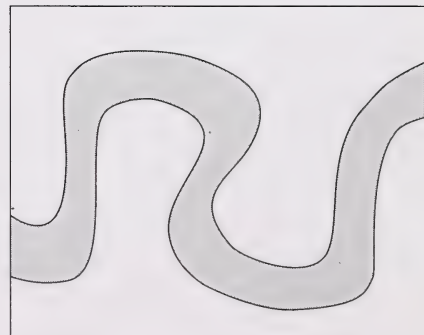
A.



B.



C.



D.

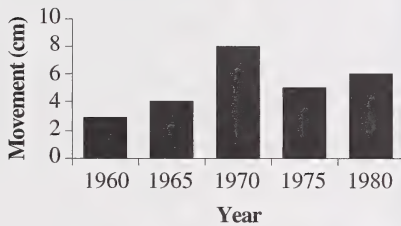
Use the following information to answer question 33.

The park naturalist in the nature centre talked about a glacier. In 1955, an engineer started to keep track of how fast the glacier was moving. The park naturalist recorded the amount of movement once every five years.

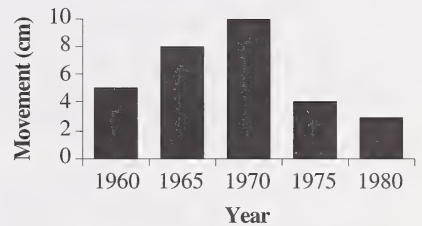
Year	Amount of movement
1955	Start of Study
1960	3 cm
1965	4 cm
1970	10 cm
1975	8 cm
1980	5 cm

33. Which graph shows the data presented in the chart?

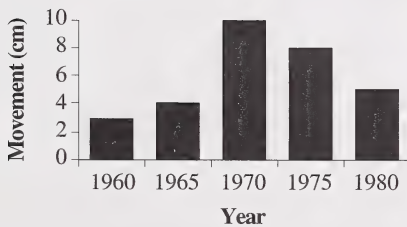
A.



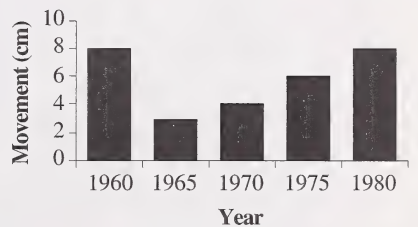
B.



C.

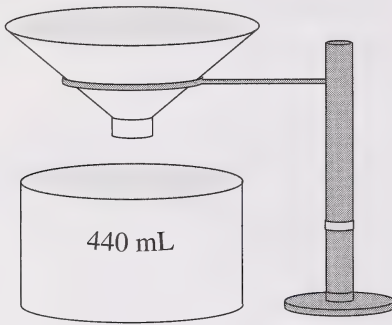


D.

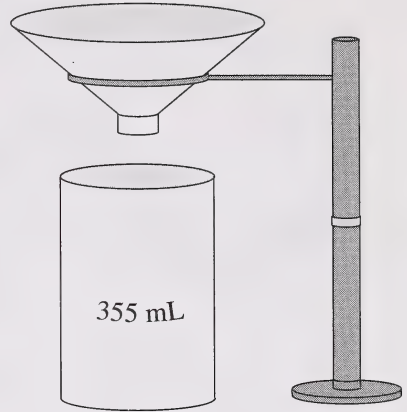


34. On a rainy day, the park naturalist helped some children make rain collectors. If it continued to rain, which of the following containers would **overflow** first?

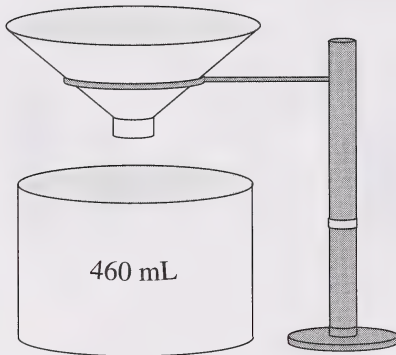
A.



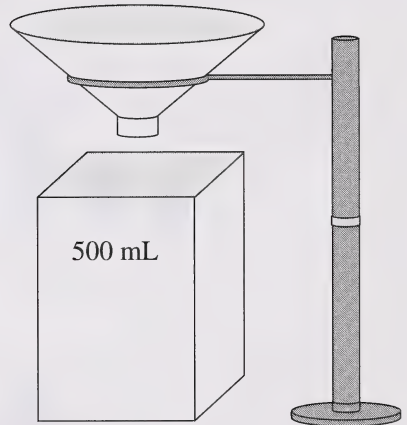
B.



C.

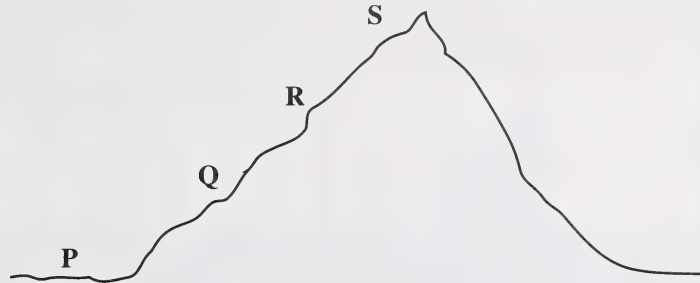


D.



Use the following information to answer question 35.

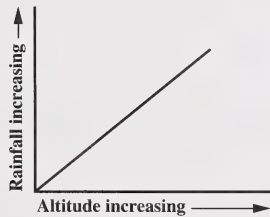
This chart from the nature centre gives information about rainfall on a nearby mountain.



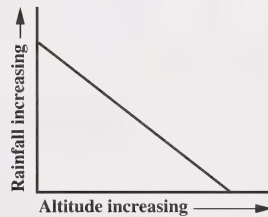
Location	Rainfall (cm per year)
P	38
Q	37
R	37
S	61

35. Which graph shows the data in the chart?

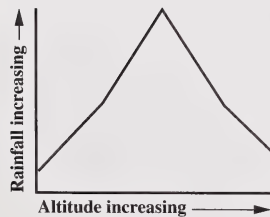
A.



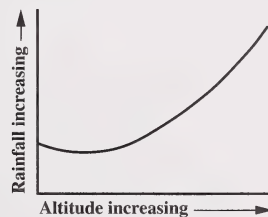
B.



C.



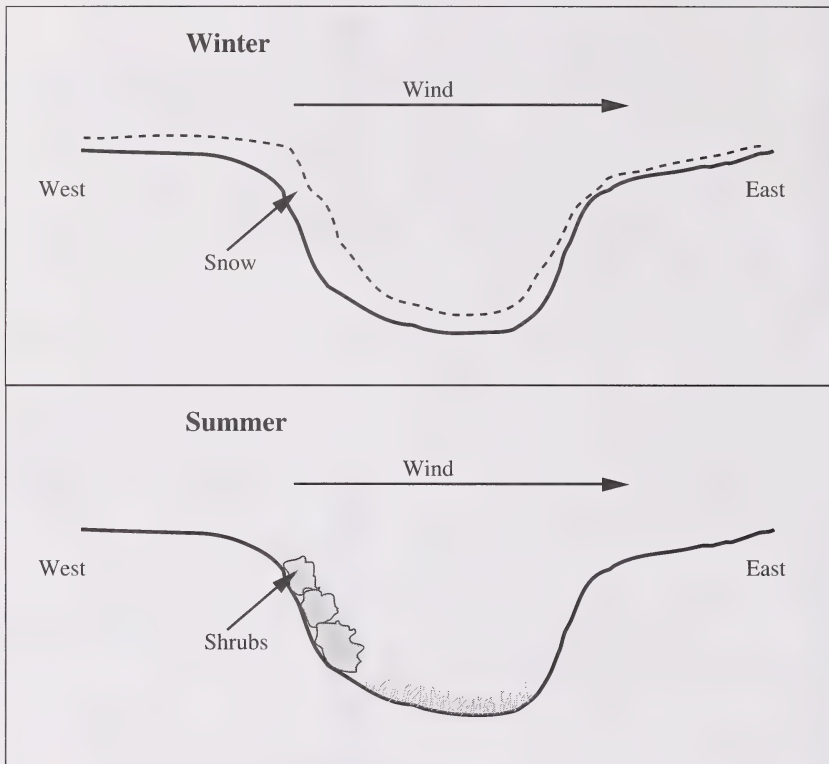
D.





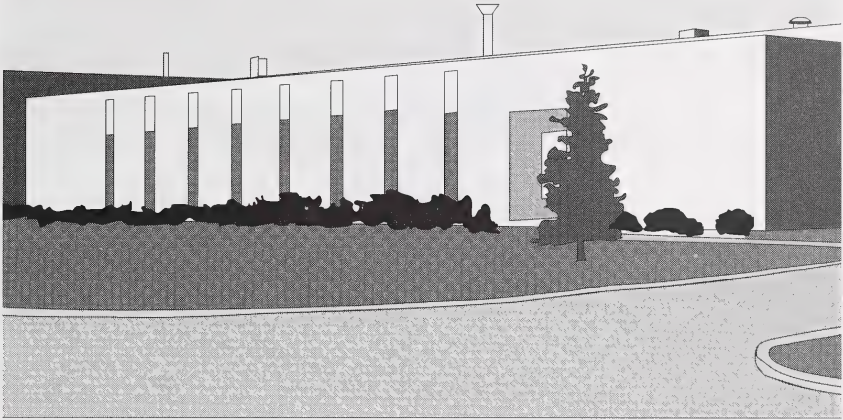
Use the following information to answer question 36.

Joyce picked up a pamphlet with sketches showing a cross section of a valley in different seasons. This information helped her to understand why shrubs grow only in certain places.



36. In this situation, shrubs grow only on the west side of the valley because that side of the valley has
- A. more plant-eating animals and more winds
  - B. fewer plant-eating animals and more disease
  - C. more moisture and less wind
  - D. less disease and less moisture

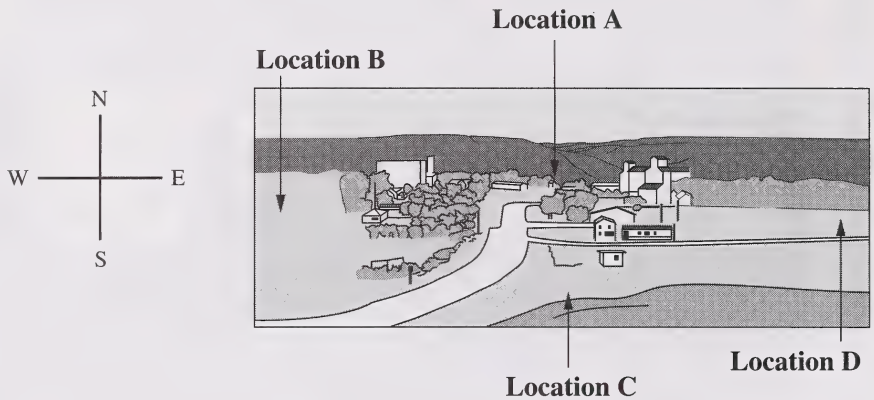
## FACTORY



There is a toy factory close to the town where Sonya and Grant live. Many people from the town work at the factory. The next ten questions are about the factory and town.

Use the following information to answer question 37.

The town council wants to build a landfill site. The town gets strong winds from the west.



37. The landfill site location that will result in the **lowest** odour level in the town is

- A. location A
- B. location B
- C. location C
- D. location D

38. Sonya tends sheep for a farmer who lives near the town. The sheep eat a mixture of grain and new grass. Some of the sheep became ill. The farmer thought that the age of the grass caused the problem and decided to test his idea. He divided the sheep into two groups. What should he feed each group to test his idea?

A.

Group 1
grain and new grass

Group 2
new grass and old grass

B.

Group 1
grain and new grass

Group 2
old grass

C.

Group 1
grain and old grass

Group 2
new grass

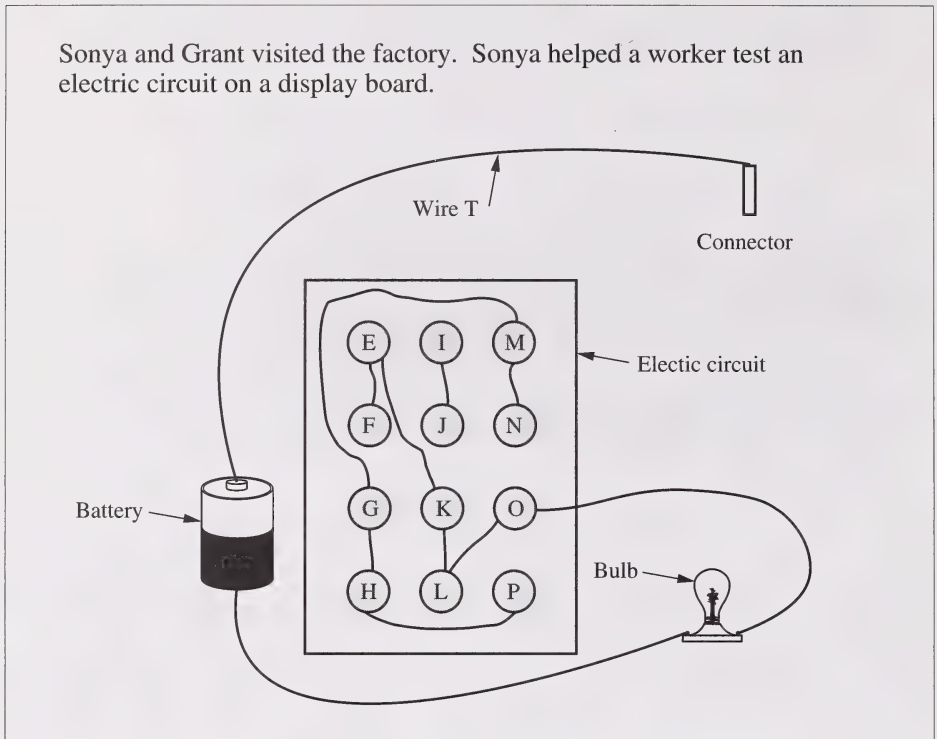
D.

Group 1
grain and old grass

Group 2
grain and new grass

Use the following information to answer question 39.

Sonya and Grant visited the factory. Sonya helped a worker test an electric circuit on a display board.



39. In order for the bulb to go on, she must connect Wire T to point

- A. I
- B. E
- C. H
- D. P



Use the following information to answer question 40.

At a bench, materials used in toys are tested to see if they will conduct electricity. The results of one test were recorded.

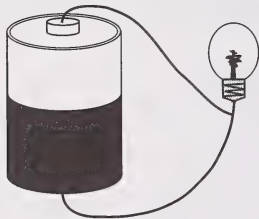
Type of material	Light bulb change
Cloth	off
Penny	on
Nickel	on
Paper	off
Plastic	off
Pencil Lead	on

40. In order for the light bulb to be on, the material **must** be

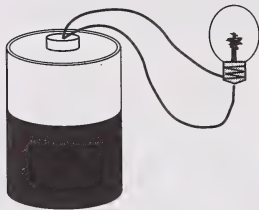
- A. a fabric
- B. a non-metal
- C. an insulator
- D. a conductor

41. Sonya tested flashlight bulbs to see if they would light. Which diagram shows the correct way to test the bulb?

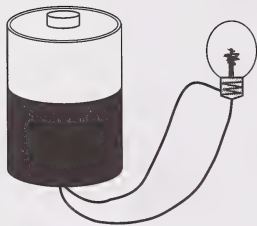
A.



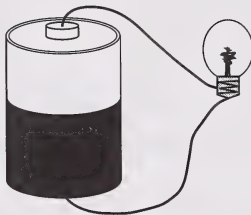
B.



C.

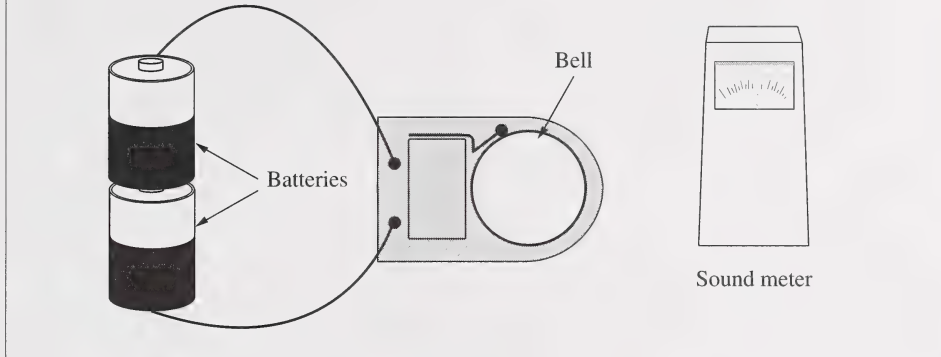


D.



Use the following information to answer question 42.

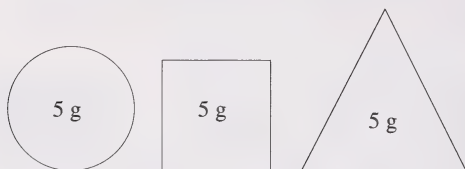
A worker questioned whether the loudness of a ringing bell depends on the batteries in the circuit. For the first part of the test, she set up this equipment and took a reading.



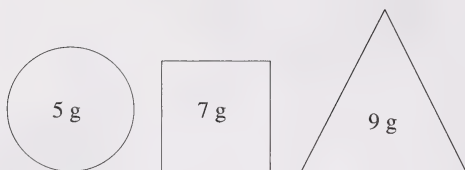
42. In the second part of the test, what does the worker need to change in order to answer her question?
- A. Size of the bell
  - B. Length of wire
  - C. Number of batteries
  - D. Distance from the bell to sound meter
- 
43. The toy factory makes chimes out of copper pipe. Grant watched an engineer test some chimes by hitting them with a hammer. The variable that was **most likely** changed to make the different sounds was the
- A. kind of metal
  - B. length of pipe
  - C. point of impact
  - D. type of hammer

44. An engineer needed to melt some aluminum. He decided to test whether shape affects the time it takes to melt a 5 g piece of aluminum. Which picture shows the pieces of aluminum he **most likely** used to do this test?

A.



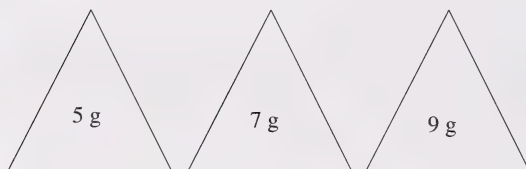
B.



C.

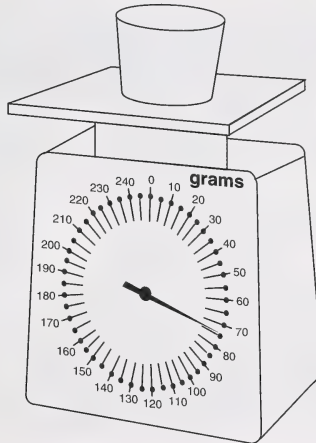


D.



Use the following information to answer question 45.

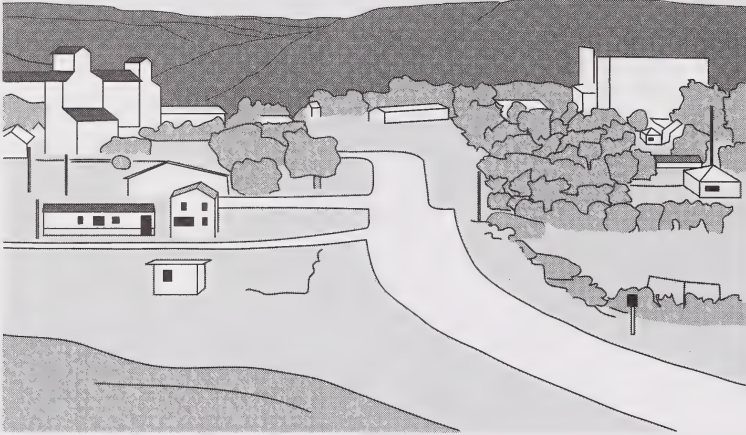
Sonya used a scale to measure 100 g of metal pellets used to make a toy figurine. The scale indicates the mass of an empty container used to weigh the metal pellets.



45. After 100 g of metal pellets have been added to the container, the needle on the scale will point to
- A. 72 g
  - B. 100 g
  - C. 174 g
  - D. 34 g
- 
46. Grant noticed that people working on electronic circuit boards had metal straps going from their wrists to the metal work table. The **most likely** reason for this is to
- A. keep workers close to their work
  - B. prevent people from dropping circuit boards
  - C. keep temperature and humidity controlled
  - D. prevent static electricity from damaging circuit boards



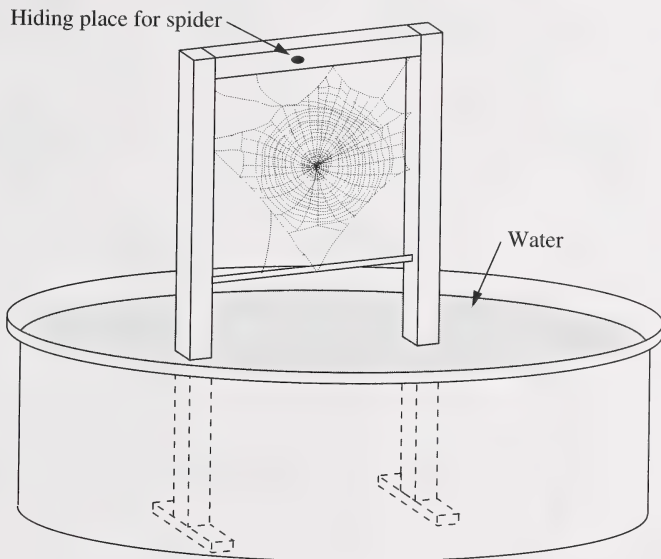
## SMALL VILLAGE



This is a small village in central Alberta. Each summer, there is a fair where students show projects. The next seven questions are about student projects shown at the fair.

Use the following information to answer question 47.

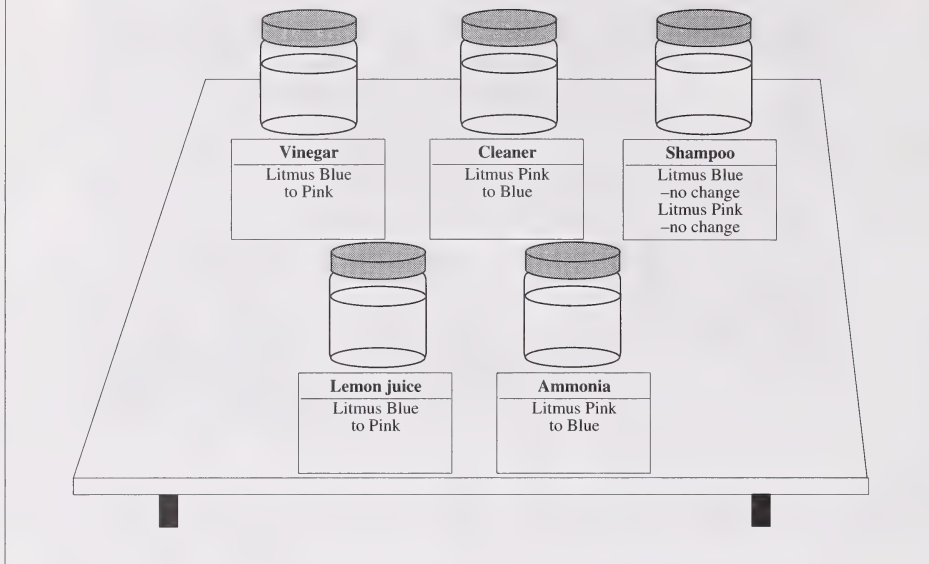
Nadia wanted to know if spiders would help to reduce the number of flying insects in a room. She did a study on how many insects a spider caught in a week.



47. Why did Nadia have the frame in a pan of water?
- A. To capture insects
  - B. To provide drinking water for the spider
  - C. To keep the stand upright
  - D. To prevent the spider from escaping

Use the following information to answer question 48.

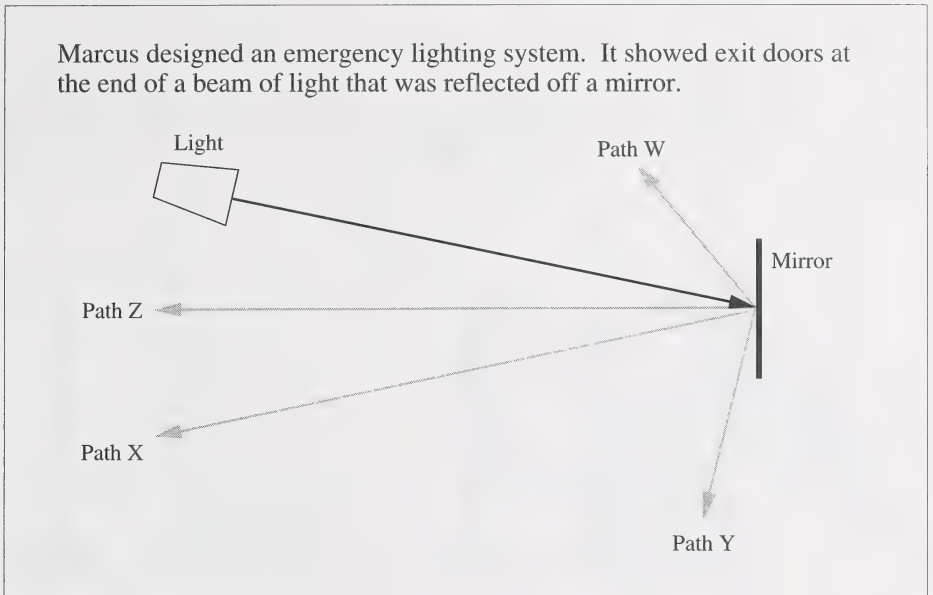
Jane was concerned about the safe storage of acids and bases in her home. She knew that acids should not be stored with bases. She poured five household liquids into containers and tested the liquids with litmus paper.



48. The items she tested were
- A. all acids
  - B. all bases
  - C. neither acids or bases
  - D. mainly acids and bases

Use the following information to answer question 49.

Marcus designed an emergency lighting system. It showed exit doors at the end of a beam of light that was reflected off a mirror.

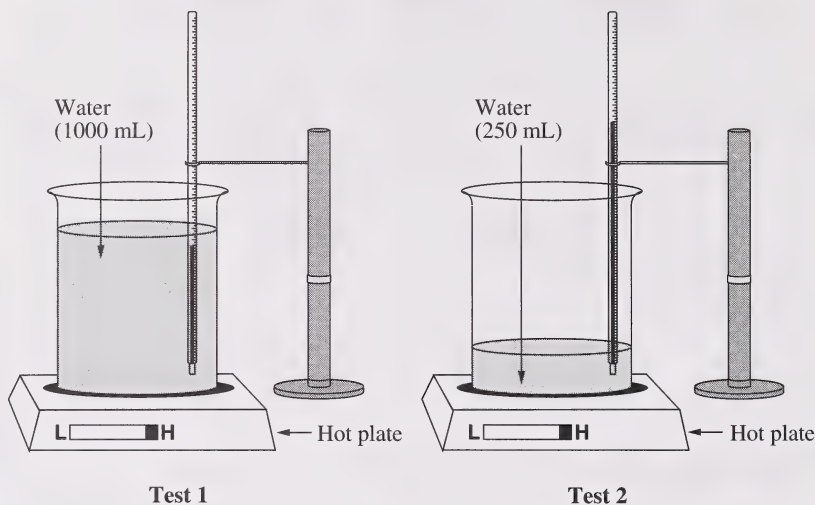


49. When the light is turned on, what will the path of light be?

- A. Path W
- B. Path X
- C. Path Y
- D. Path Z

Use the following information to answer question 50.

The hot water tank in Kelly's house did not provide enough water. However, she was concerned that it would take longer to heat water in a large tank. Therefore, she designed an experiment to test how much longer it would take to heat a large volume of water than a small volume of water.



Kelly's results are in this chart:

Test	Amount of Water	Amount of Time to reach 90°C from 25°C	Hot Plate Switch Setting
1	1000 mL	4 minutes	High
2	250 mL	1 minute	High

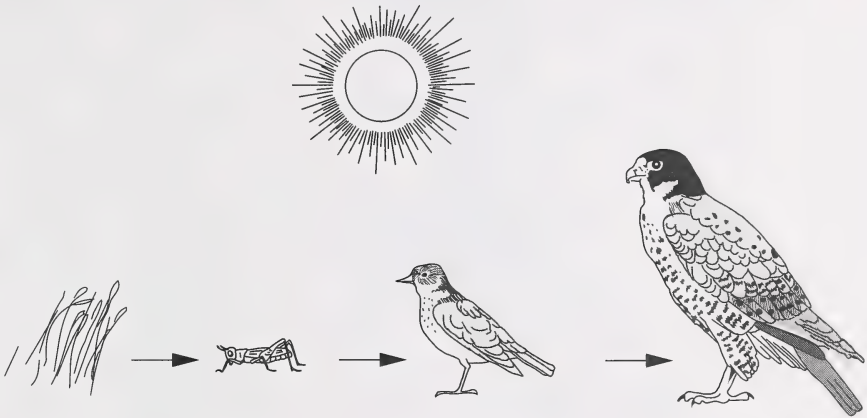
50. The variable that Kelly changed was the

- A. clock timer
- B. thermometer
- C. amount of heat
- D. volume of water



Use the following information to answer question 51.

Mike took photographs near the village. For the summer fair, he made this poster of a food chain.



51. The **most** important energy source for the food chain is the

- A. insect
- B. sun
- C. plant
- D. bird

Use the following information to answer question 52.

Toni wanted to grow hyacinth plants. At the beginning of September, Toni planted ten hyacinth bulbs and put them in a cool, dark basement. The same amount of water was given to each plant every two weeks. At the end of February, she brought them out of the basement and put them onto a window ledge.

52. When the hyacinth plants were in the basement, which variable did Toni keep the same?

- A. Height of plant
- B. Amount of light
- C. Size of bulb
- D. Amount of fertilizer

Use the following information to answer question 53.

Nathan gets headaches and wants to help other people who also suffer from them. He read that air pressure affects headaches, so for nine days he recorded the air pressure and if he had a headache. Nathan displayed the results on this chart.

Day	Air Pressure	Headache
1	95	none
2	99	mild
3	99	none
4	101	mild
5	101	none
6	101	none
7	97	mild
8	95	mild
9	95	none

53. The chart shows that Nathan gets a headache when the air pressure

- A. stays the same
- B. changes
- C. is high
- D. is low

## HIKING CLUB



Samuel and Kayla are members of a hiking club. The club hikes twice each month in different locations around Alberta. The next seven questions are about Samuel's and Kayla's activities.

*Use the following information to answer question 54.*

While hiking near Drumheller, a very dry area in south-central Alberta, Samuel and Kayla stopped at some hoodoos. Hoodoos are unusual rock formations.

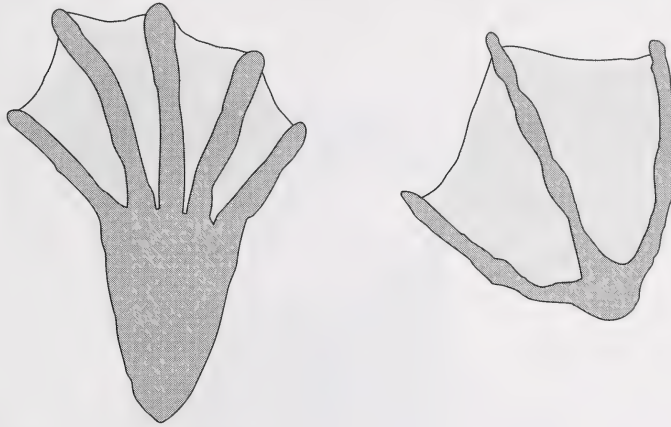


54. Hoodoos were formed **mainly** by

- A. wind
- B. sun
- C. snow
- D. cold

*Use the following information to answer question 55.*

On another hike, Kayla and Samuel observed these tracks.



- 55.** Kayla and Samuel were probably hiking in a
- A.** forest area
  - B.** mountain area
  - C.** wetland area
  - D.** grassland area

*Use the following information to answer question 56.*

Early one morning, Kayla filled her cup with water from a cold mountain stream. After 10 minutes, she observed water drops on the outside of the cup.



- 56.** She commented to Samuel that this demonstrates
- A.** the water cycle
  - B.** water vapour cooling
  - C.** the heating of water
  - D.** water evaporation



Use the following information to answer question 57.

Samuel is interested in learning about living things. He classified the following organisms into these two groups:

Group X



Group Y



57. Which of these organisms belongs to Group Y?

A.



B.



C.



D.



58. On a number of different hikes, Kayla noted that some predators have legs or wings that help them search for food. This observation suggests that legs or wings are needed to
- A. run away from prey
  - B. travel great distances
  - C. hide from enemies
  - D. make shelters

*Use the following information to answer question 59.*

While hiking in southern Alberta, Samuel talked to a farmer who told him about burrowing owls. The farmer had a record of his farming activities and the number of owls that he had observed in certain years.

Farming Activities Near Owl Homes	Years	Number of Owls
hay	1985–87	10
grazing cattle in the fall	1987–89	9
planting crops every year	1989–91	7
spraying crops three times each year	1991–93	2

59. Which activity seemed to result in the greatest **decrease** of the number of burrowing owls?
- A. Haying twice each summer
  - B. Grazing cattle in the fall
  - C. Planting crops every year
  - D. Spraying crops three times each year

Use the following information to answer question 60.

In late October, Samuel and Kayla wanted to hike in Banff National Park. They were concerned about temperature and wind chill, so Samuel got this Wind Chill Chart from the weather office.

**Wind Chill Chart**

Wind Speed Km/h	Temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
10	-2	-7	-12	-17	-22	-27	-32	-38
20	-7	-13	-19	-25	-31	-37	-43	-50
30	-11	-17	-24	-31	-37	-44	-50	-57
40	-13	-20	-27	-34	-41	-48	-55	-62
50	-15	-22	-29	-36	-44	-51	-58	-66
60	-16	-23	-31	-38	-45	-53	-60	-68

60. If the outside temperature is  $-5^{\circ}\text{C}$ , how cold would it feel with a wind speed of 40 Km/h?
- A.  $-7^{\circ}\text{C}$   
B.  $-13^{\circ}\text{C}$   
C.  $-20^{\circ}\text{C}$   
D.  $-40^{\circ}\text{C}$







University of Alberta Library



0 1620 0192 8215